

# Artificial intelligence in operations management and supply chain management: an exploratory case study

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## Abstract

Abstract With the development and evolution of information technology, competition has become more and more intensive on a global scale. Many companies have forecast that the future of operation and supply chain management (SCM) may change dramatically, from planning, scheduling, optimisation, to transportation, with the presence of artificial intelligence (AI). People will be more and more interested in machine learning, AI, and other intelligent technologies, in terms of SCM. Within this context, this particular research study provides an overview of the concept of AI and SCM. It then focuses on timely and critical analysis of AI-driven supply chain research and applications. In this exploratory research, the emerging AI-based business models of different case companies are analysed. Their relevant AI solutions and related values to companies are also evaluated. As a result, this research identifies several areas of value creation for the application of AI in the supply chain. It also proposes an approach to designing business models for AI supply chain applications.